

## AMENDMENT TO THE CLAIMS

This listing of claims will replace the prior version and listing of claims in the application.

### Listing of Claims

Claims 1-27 (cancelled).

28. (Currently Amended) A method of reducing gas phase reduced nitrogen species emissions from the regeneration zone during fluid catalytic cracking of a hydrocarbon feedstock into lower molecular weight components, said method comprising contacting a hydrocarbon feedstock with a cracking catalyst at elevated temperature whereby lower molecular weight hydrocarbon components are formed, said cracking catalyst comprising (a) a cracking component suitable for catalyzing the cracking of hydrocarbons, and (b) ~~the composition of Claim 1, a~~ component for reducing gas phase reduced nitrogen species, said component comprising particles having a mean particle size of about 50 to about 200 $\mu$ m and comprising (i) at least about 5.0 wt % of acidic metal oxide containing substantially no zeolite; (ii) a metal component selected from the group consisting of alkali metal, alkaline earth metal, and mixtures thereof; (iii) at least 0.1 wt %, measured as metal oxide, of an oxygen storage metal oxide; and (iv) at least 0.1 ppm of a noble metal component selected from the group consisting of platinum, palladium, iridium, rhodium, osmium, ruthenium, rhenium and mixtures thereof, said metal component (ii) being present in amount of at least 0.5 wt %, measured as metal oxide, of the composition.

29. (Originally Presented) The method of Claim 28 further comprising recovering the cracking catalyst from said contacting step and treating the used catalyst in a regeneration zone to regenerate said catalyst.

30. (Originally Presented) The method of Claim 29 wherein the regeneration zone is operated in a partial mode of combustion.

31. (Originally Presented) The method of Claim 28 wherein components (a) and component (b) are fluidized during contacting said hydrocarbon feedstock.

32. (Originally Presented) The method of Claim 29 wherein the regeneration zone is operated in incomplete mode combustion.

33. (Currently Amended) A method of reducing NO<sub>x</sub> emissions from the regeneration zone during fluid catalytic cracking of a hydrocarbon feedstock into lower molecular weight components, said method comprising contacting a hydrocarbon feedstock with a cracking catalyst at elevated temperature whereby lower molecular weight hydrocarbon components are formed, said cracking catalyst comprising (a) a cracking component suitable for catalyzing the cracking of hydrocarbons, and (b) the composition of Claim 1, a NO<sub>x</sub> reduction component comprising particles having a mean particle size of about 50 to about 200μm and comprising (i) at least about 5.0 wt % of acidic metal oxide containing substantially no zeolite; (ii) a metal component selected from the group consisting of alkali metal, alkaline earth metal, and mixtures thereof; (iii) at least 0.1 wt %, measured as metal oxide, of an oxygen storage metal oxide; and (iv) at least 0.1 ppm of a noble metal component selected from the group consisting of platinum, palladium, iridium, rhodium, osmium, ruthenium, rhenium and mixtures thereof, said metal component (ii) being present in amount of at least 0.5 wt %, measured as metal oxide, of the composition.

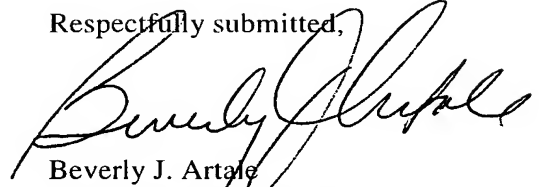
34. (Originally Presented) The method of Claim 33 further comprising recovering the cracking catalyst from said contacting step and treating the used catalyst in a regeneration zone to regenerate said catalyst.

35. (Originally Presented) The method of Claim 34 wherein the regeneration zone is operated in a partial mode of combustion.

36. (Originally Presented) The method of Claim 33 wherein components (a) and component (b) are fluidized during contacting said hydrocarbon feedstock.

37. (Originally Presented) The method of Claim 34 wherein the regeneration zone is operated in an incomplete mode of combustion.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Beverly J. Artale", written over the typed name and title.

Beverly J. Artale  
Attorney for Applicants  
Reg. No. 32,366

Tel: (410) 531-4683  
W.R. Grace & Co.-Conn.  
7500 Grace Drive  
Columbia, Maryland 21044

Charge: DAV/FCC